

HAEMANTHUS CANALICULATUS,* A NEW FIRE-LILY FROM THE WESTERN CAPE PROVINCE

M. R. LEVYNS

During the latter part of December 1960 a disastrous fire swept through an area from Betty's Bay to Rooi Els. Before it was controlled, large stretches of country had been reduced to blackened wastes.

At the end of February, two months after the fire, the slopes, apart from an occasional *Asparagus* or *Bobartia*, were seemingly lifeless. However, in places where water had seeped down from the slopes, giving rise to marshy conditions, the situation was very different. Instead of black desolation numerous plants of Red Hot Poker (*Kniphofia uvaria*) with fully developed leaves and brilliantly coloured inflorescences, provided sheets of colour of breath-taking beauty. All the way from Rooi Els to Betty's Bay, whenever the soil was sufficiently moist, this wonderful display re-appeared.

A short distance from Rooi Els, Red Hot Pokers in abundance were growing close to the road. Among them were some brilliant red inflorescences of *Haemanthus*. At first they were taken to be a marsh form of the common *Haemanthus rotundifolius* but close examination suggested that this was not so. The colour was a more fiery red. The involucral bracts were longer, narrower and more pointed. When fully opened the bracts spread outwards instead of forming a cup. Later it became obvious that although its berries were similar they were much less fertile. Being hysteranthous, it was necessary to wait until after the winter rains had started for leaves to appear.

A second visit to the site was paid towards the end of June when a search for broad, flat leaves similar to those of *Haemanthus rotundifolius* was made. Nothing similar was found. In February relatively few species had made their appearance above the ground. Now it was very different. The old inflorescences had disappeared so that there was nothing to mark the exact spot where the species had been growing. Green shoots of innumerable plants had appeared, forming a dense, closed community. Anyone familiar with the tightly packed vegetation of a marsh in the western Cape, will realise the difficulties of a search

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Plate 1.

Haemanthus canaliculatus sp. nov. In this specimen the peduncle made an acute angle with the ground. Photo: J. E. P. Levyns.

such as this. Eventually two fleshy, erect and very narrow leaves were found. Each leaf, due to the rolling of its edges, was deeply channelled on the upper surface. They were so unlike any known leaves of *Haemanthus*, that only after a bulb had been dug up, was it certain that they belonged to a species of that genus. The characteristic overlapping storage leaves in two opposing rows, left no doubt about that. The green leaves at that time were about 18 cm. long. In one case three leaves were observed but the normal number seems to be two. Another visit to the area in October showed that the leaves had elongated considerably for the average length was now 36 cm. The diameter had not increased. In view of the very narrow channelled leaves it is proposed to name this species *Haemanthus canaliculatus*.

In going through the Incertae in the Bolus Herbarium it was discovered that this species had been found some years previously by Mrs. M. Brunt of Betty's Bay. Her specimen too, had been collected after a fire. During the Christmas holidays of the present year a small fire was started in the Betty's Bay area by small children playing with matches. Fortunately this was brought under control before it had spread far. A small damp hollow lay within the area and there in the later part of February Red Hot Pokers and this new species of *Haemanthus* were growing together. Most of the inflorescences were like those seen in 1961 near Rooi Els with the exception of two. One had unusually long pedicels, giving it a *Nerine*-like aspect. The other differed in colour, being pale pink.

Normally the peduncle stands erect but on both occasions a few plants were seen in which the peduncle made an acute angle with the ground. In one case it was lying more or less horizontally, thus suggesting that geotropism alone is not responsible for its position.

Up to the present no one has found the species excepting after fire and it seems likely that fire is needed to stimulate flowering.

Haemanthus canaliculatus sp. nov.

Herba bulbosa glaberrima. Bulbus diam. c. 9 cm., tunicis bifariis. Folia 2 vel interdum 3, hysteraantha, anguste linearia, marginibus involutis, canaliculata, fere 36 cm. longa. Pedunculus crassus, roseus. Bractee lanceolatae, paulo acutae, rubidae, patentes. Flores numerosi, conferti, rubidi. Perianthum tubo c. 5 mm. longo; lobis c. 20 mm. longis. Bacca globosa. Semen ovoideum, castaneum, nitidum.

TYPE: Levyns 11, 105 (in the Bolus Herbarium), marshy places above Rooi Els. Levyns 11, 140 and Levyns 11, 223 show the young and old leaves respectively and a bulb from plants growing in the same marshy spot as the type.

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I wish to express gratitude to my husband for his ever ready help. Patient search led him to the discovery of the leaves of this new species.

I also wish to thank Mr. A. Fricke for a print from which the illustration has been made. The original was a colour transparency.